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**Amendments to the Claims:**

Please add Claims 25-34 as follows:

1. (original) A label printer for printing on labels spaced longitudinally along a carrier web with each label having a predetermined thickness and a leading edge and a trailing edge, the printer comprising:

a driving mechanism for advancing the carrier web along a media path,

a thermal print head assembly supported by a frame,

the thermal print head assembly mounted for movement toward and away from the carrier web and including a line of heater elements aligned transverse to the direction of travel of the carrier web,

a bias mechanism urging the print head toward the web so that the heater elements are pressed against the web,

a motion sensor for sensing a displacement of the print head assembly due to the passages of the edges of the labels beneath the heater elements, and

a controller responsive to the motion sensor for synchronizing printing with the edges of each label;

the motion sensor arranged rigidly coupled to the frame at a first end.

2. (original) The label printer of claim 1, wherein each of the labels is removably attached to the carrier web by a pressure-sensitive adhesive.

3. (original) The label printer of claim 1, wherein each of the labels has a thermally sensitized surface engageable with said heater elements.

4. (original) The label printer of claim 1, and further comprising a thermally activated ink transfer ribbon disposed between the heater elements and the web.

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5. (original) The label printer of claim 1, wherein the motion sensor is a piezoelectric transducer coupled between the frame and the print head; the motion sensor arranged to bend in response to the displacement of the print head.

6. (original) The label printer of claim 1, wherein the motion sensor is a piezoelectric transducer coupled to a bending member coupled at a first end to the frame and at a second end to the print head, the bending member arranged to bend in response to the displacement of the print head.

7. (original) The label printer of claim 1, wherein the motion sensor is an arrangement including an emitter, a reflector and a detector; and at least one of the emitter, the reflector and the detector is rigidly coupled to the frame.

8. (original) The label printer of claim 7, wherein the reflector is connected to the print head and the emitter arranged to direct a beam onto the reflector, the beam reflected to the light detector according to the displacement of the print head.

9. (original) The label printer of claim 1, wherein the motion sensor is a position sensor connected to the frame.

10. (original) The label printer of claim 1, wherein the thermal print head is rigidly coupled to a pivot which extends through the frame; the motion sensor mounted to a far side of the frame, responsive to angular displacement of the pivot.

11. (original) The label printer of claim 10, wherein the motion sensor is an arrangement including a light emitter and a detector; the light emitter and the detector separated by a variable area mask coupled to the pivot.

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12. (original) The label printer of claim 10, wherein the motion sensor is an arrangement including an electrical position sensor and a target probe;  
the target probe mounted on an arm coupled to the pivot.

13. (original) A label printer for printing on labels spaced longitudinally along a carrier web with each label having a predetermined thickness and a leading edge and a trailing edge, said printer comprising:  
a driving mechanism for advancing the web along a path,  
a print head support mounted for movement toward and away from the web,  
a thermal print head carried by said support for movement therewith and including a line of heater elements aligned transverse to the direction of  
travel of the web,  
a bias mechanism urging the print head support toward the web so that the heater elements are pressed against the web,  
a motion sensor carried by the support for sensing displacement of the print head due to the passages of the edges of the labels beneath the heater elements, and  
a controller responsive to the motion sensor for synchronizing printing with the edges of each label;  
the motion sensor arranged rigidly coupled to the frame at a first end.

14. (original) The label printer of claim 13, wherein each of the labels is removably attached to the carrier web by a pressure-sensitive adhesive.

15. (original) The label printer of claim 13, wherein each of the labels has a thermally sensitized surface engageable with said heater elements.

16. (original) The label printer of claim 13, and further comprising a thermally activated ink transfer ribbon disposed between the heater elements and the web.

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17. (original) The label printer of claim 13, wherein the motion sensor is a piezoelectric transducer coupled between the frame and the support; the motion sensor arranged to bend in response to the displacement of the print head.

18. (original) The label printer of claim 13, wherein the motion sensor is a piezoelectric transducer coupled to a bending member coupled at a first end to the frame and at a second end to the support, the bending member arranged to bend in response to the displacement of the print head.

19. (original) The label printer of claim 13, wherein the motion sensor is an arrangement including an emitter, a reflector and a detector; and at least one of the emitter, the reflector and the detector rigidly coupled to the support.

20. (original) The label printer of claim 19, wherein the reflector is connected to the print head and the emitter arranged to direct a beam onto the reflector and reflected to the light detector according to the displacement of the print head.

21. (original) The label printer of claim 13, wherein the motion sensor is a position sensor connected to the frame.

22. (original) The label printer of claim 13, wherein the the print head support is rigidly coupled to a pivot which extends through the frame;  
the motion sensor mounted to a far side of the frame, responsive to angular displacement of the pivot.

23. (original) The label printer of claim 22, wherein the motion sensor is an arrangement including a light emitter and a detector;  
the light emitter and the detector separated by a variable area mask coupled to the pivot.

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24. (original) The label printer of claim 22, wherein the motion sensor is an arrangement including an electrical position sensor and a target probe;  
the target probe mounted on an arm coupled to the pivot.

25. (new) A printer for printing on media spaced longitudinally along a carrier web, the printer comprising:  
a driving mechanism for advancing the carrier web along a media path;  
a print head assembly supported by a frame, the thermal print head assembly mounted for movement toward and away from the carrier web; and  
a sensor for sensing a displacement of the print head assembly due to the passage of the of the media beneath the print head.

26. (new) The printer of claim 25, wherein the media has a leading edge, said printer further comprising a controller responsive to the sensor for synchronizing printing with the edge of each media.

27. (new) The printer of claim 26 further comprising a bias mechanism urging the print head toward the web so that the print head is pressed against the web.

28. (new) The printer of claim 25, wherein the sensor arranged rigidly coupled to the frame at a first end.

29. (new) The printer of claim 25, wherein the sensor is a piezoelectric transducer coupled between the frame and the print head, the sensor arranged to bend in response to the displacement of the print head by the media.

30. (new) The printer of claim 25, wherein the sensor is a piezoelectric transducer coupled to a bending member coupled at a first end to the frame and at a second end to the print head, the bending member arranged to bend in response to the displacement of the print head by the media.

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31. (new) The printer of claim 25, wherein the sensor is an arrangement including an emitter, a reflector and a detector, and at least one of the emitter, the reflector and the detector is rigidly coupled to the frame.

32. (new) The printer of claim 25, wherein the sensor is a position sensor connected to the frame.

33. (new) The printer of claim 32, wherein the sensor is an arrangement including a light emitter and a detector; the light emitter and the detector separated by a variable area mask coupled to the pivot.

34. (new) The printer of claim 32, wherein the sensor is an arrangement including an electrical position sensor and a target probe; the target probe mounted on an arm coupled to the pivot.